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ATTITUDE TO CLIMATE CHANGE MITIGATION IN ERA OF SECURITY THREATS: TOWARDS THE DEVELOPMENT AND SUSTAINABILITY OF AFRICAN ECONOMIES

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ABSTRACT

Terrorism which has dire negative influence on global economies is traceable to climate change. This study determined the attitude of adult education lecturers to climate change mitigation as a way of fostering the development and sustainability of African economies. Descriptive survey design was used. Responses of 25 lecturers that completed and returned their questionnaires were used for analysis out of the entire population that were sampled. Data collected were analyzed using mean statistics for research questions 1 and 3 while frequency distribution and percentage were used for research questions 2 and 4. The study found that adult education lecturers in the South East federal universities were concerned about climate change mitigation; were favourably disposed towards making climate change part of the curriculum for tertiary institutions; were very willing to play roles / make personal sacrifices in climate change mitigation; and were to a great extent awakened to know more about climate change as a result of participating in this study. The study concludes that adult education lecturers were willing and ready to assist in climate change mitigation and that stakeholders in environmental matters should utilize them in redressing climate change at all levels of government and through the activities of NGOs. Funds in form of grants should be made available for them to embark on climate change related researches and campaigns in order to bridge the gap between willingness to do and action.

Keywords: Climate change, mitigation, attitude, African economies, development, sustainability

Introduction

The fact that climate change poses a serious threat to the existence of man is no longer controvertible. Humans can no longer afford to live in oblivion of the imminent danger that unchecked climate change poses

to development and sustainability of the economy especially as it affects developing nations. In fact, most of the security threats such as insurgences, armed banditry, some communal clashes, kidnapping, political killings, Boko haram activities, farmer- herder killings and some forms of restiveness may be traceable to climate change because terrorism has been linked to climate change. This is why this paper discusses climate change in a bid to tackle security and economic challenges in Africa.

According to Poplawsky (2015), terrorist events increased worldwide by five-fold since 9/11. He narrated that the climate change which resulted in serious drought which Syrians faced from 2007 to 2010 caused massive widespread crop failure, a mass migration of 1.5 million people from farming families to the cities, and a doubling of food prices in a single year. Poplawsky stated that a study concluded that climate change was a factor in the violent Syrian uprising that started in 2011. The disaffected, unemployed migrant youth in the cities were ripe for picking by ISIS which arose during this period. ISIS has spread terror across the globe in unprecedented manner. The insecurity caused by terror contributes greatly to dwindling economy and particularly endangers food security (Omonibo, 2021). In Nigeria, terrorists' activities have adverse serious effects on the operations of oil companies and industries. Terrorism threats chased oil companies away. Many expatriates left the country. Some companies relocated their headquarters to safer African countries. Investors are discouraged from coming to Nigeria. There is high rise in the cost of cooking gas and many people are going back to firewood. This will result in further deforestation. Even as the government is looking to agriculture for rescue, activities of armed herdsmen threaten that. It is most likely that climate change is responsible for the increase in herder migration and the current spate of forceful invasion and destruction of farmlands. This is part of the reason it is important to address climate change in tackling security and economic challenges in Africa. Hence, this study on attitude to climate change mitigation.

The Intergovernmental Panel on Climate Change [IPCC] (2007) defines climate change as any change in climate over time whether due to natural variability or as a result of human activity. Climate change is part of the earth's natural variability which is related to interactions among the atmosphere, ocean, and land, as well as changes in the amount of solar radiation reaching the earth (Bello, 2015). Observable disasters such as draught, flood, erosion which are threatening human existence are largely due to climate change. Other evidences of climate change include temperature rise or drop, hole in the ozone layer and deforestation. Some experts claimed that climate change usually takes place over at least 150 years with clear and permanent impact on the ecosystem (Ayoade, 2003 as cited in Ajadike, 2014) while others see it as change over decades.

According to Heider (2019), increases in temperature, variable rainfall, rise in sea level and flooding, drought and desertification, land degradation, more of frequent extreme weather events, pollution of fresh water resources and loss of biodiversity (Elisha et al. 2017; Ebele & Emodi 2016 in Heider) are evidence that Nigerian climate has been changing. Lake Chad and other lakes and streams are drying up (Dioha & Emodi 2018 in Heider). Experts' projections show that there will be increase in rainfall variation which is expected to increase flooding and submersion in coastal lands as well as

significant increase in temperature over all the ecological zones (Akande et al. 2017 in Heider). While climate change is a national concern, the challenge associated with it varies across the country. This is because Nigeria has a tropical climate with two precipitation regimes. The low precipitation in the north is characterized by short grass and marginal savanna while the high precipitation in the South East and South West is characterized by rainforest and mangrove. The implication of these is aridity, persistent drought and desertification in the North, erosion and large scale flooding in the South (Akande et al 2017, Nkechi et al. as cited in Heider, 2019). Global warming and extreme weather events have serious negative impact on economic development.

Every sector will be affected by climate change. In Agriculture, which is the mainstay of the majority of rural dwellers in Africa, it portends lower yield because it is difficult for farmers to plan. Climate change is a serious threat to agriculture as agriculture is solely dependent on climate system for sustenance. Crop yield, fishery, forestry, health, energy, commerce and larger economy are all affected by climate change. Investors cannot predict and plans are often sabotaged. Furthermore, Africa as the main supplier of raw materials for industrialized nations. This depletes natural resources in Africa. Studies have shown that it is people with least money who contributed the least to climate change that are the most vulnerable to its effects (Bello, 2015; Wei et al., 2014). Less developed continents stand to suffer more from the effect of climate change which the developed/ industrialized countries are largely responsible for. In effect, African continent and its economies stand to lose more from climate change. As what affects one part of the globe invariably affects the other, United Nations decided to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; integrate climate change measures into national policies, strategies and planning; improve education, awareness-raising and human and institutional capacity on climate change mitigation, impact reduction and early warning; implement the commitment undertaken by parties to the United Nations Framework Convention on Climate to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible; and promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focusing on women, youth and local and marginalized communities.

Climate change mitigation and adaptation are the two major responses to climate change globally. According to Iberdrola (2021), the difference is that mitigation is aimed at tackling the causes and minimizing possible impacts of climate change while adaptation concentrates on how to take advantage of any opportunities that arise. Mitigation involves the reduction in emission of any greenhouse gases that contribute to climate change. According to NASA (2021), it refers to reducing and stabilizing the levels of heat-trapping greenhouse gases in the atmosphere. In simple terms, mitigation refers to activities that reduce the release of carbon dioxide or whatever other combination of carbon that is harmful to nature. Little wonder, experts hap on the need for low carbon economy globally. According to Iberdrola (2021), measures of mitigation include improving energy

efficiency and opting for renewable energy over fossil fuels; promoting public transport and sustainable mobility by increasing the number of journeys in town by bicycle, reducing the number of flights and taking more trips by train or in shared cars; promoting ecological industry, agriculture, fishing and livestock farming, food sustainability, responsible consumption and the three Rs rule (reduce, reuse and recycle); and taxing the use of fossil fuels and CO_2 emissions market.

Heider (2019), while making a case for the use of renewable/ clean energy as a way of mitigating the effects of climate change, also listed some examples of sectors/ lifestyle choices. They include less meat consumption, phasing out of inefficient appliances, greater access to and use of public transportation, encouragement of public infrastructure and services for effective waste reduction and tree planting and re-forestation. International community have been trying to limit CO_2 emissions with a complimentary effort at adaptation in order to also minimize the effect of climate change.

Climate change adaptations involves responding to changes induced as a result of climate change. Adaptation can be reactive or anticipatory (Fortuny, 2021). Adaptation involves adjusting to actual or expected future climate. The goal is to reduce human vulnerability to harmful effects of climate change and making the most of any potential beneficial opportunities associated with climate change (NASA, 2021). For want of space, this study can only discuss so much about adaptation as it is not the focus of the study.

The global approach to tackling climate change demands that everybody must be involved. As man is largely responsible for global warming and climate change, man can also put a stop to it. According to Aizebeokhai (2009), all hands must be on deck to ensure that emission of greenhouse gases especially carbon dioxide starts shrinking instead of growing. People cannot be involved unless they are aware. Awareness of climate change must of necessity include awareness of its causes/ risk factors and their responsibility towards stemming global warming among others. Chukwuemerie, Obiozor and Ihekwoaba (2021), in a similar study, described awareness as knowledge that makes people live and act in consciousness of the threat and derivable advantage of the phenomenon they know about. Although awareness is not the main focus of this study, it must be acknowledged that one's attitude to a phenomenon depends a lot on the extent of the person's awareness of it. An individual's perception of climate change risk is closely related to mitigating actions and adaptive behavior change they would display (Akompeh et al. 2013, as cited in Wei et al. 2019). If the campaign to contain climate change must succeed, it is necessary to address the attitude of humans to it.

Attitude refers simply to stance, disposition, state of mind or action towards a given issue. Williams (2000) as cited in Ezeudu, Ezeudu and Sampson (2016) defined attitude as readiness to act in a certain way expressed by a person's words, gestures or facial expression. Ezeudu, Ezeudu and Sampson explained climate change attitude to mean the way of thinking and acting by individual towards the issue of global climate change. Education is key to awareness and consequently attitude. Studies indicate that Nigeria media has not given sufficient attention to climate change issue (Ajaero and Anome, 2018, cited in Heider, 2019). In view of this, more responsibility is placed on players in institutions of learning to educate

the populace. Researchers have carried out studies on secondary school students' awareness of climate change, attitude and behaviour of health professionals in relation to climate change, farmers' attitude to climate change adaptation, traders' climate change mitigation responses and investment opportunities but to the best of these researchers' knowledge, no study has been conducted to investigate the attitude of adult education lecturers to climate change mitigation. Since adult education is concerned with educating adults who are the purveyors of development, this study purposively chose adult education lecturers as respondents.

Adult education lecturers can sensitize farmers through agriculture extension programmes. Duru and Emetumah (2016) as cited in Heider (2019) observed that agricultural extension services are paramount in these times. Adult education lecturers also teach pupil teachers about climate change and can carry out campaigns to communities to sensitize the people about climate change. Their disposition and reaction to climate change will determine if they would embark on these activities. The study also set out to find if participation in this study can awaken the interest to know more about climate change. Thus, this study sought to find out the attitude of Adult Education lecturers in federal universities in South East of Nigeria to climate change mitigation.

Research Questions

1. To what extent are adult education lecturers in the federal universities in South East Nigeria concerned about climate change mitigation?
2. What is adult education lecturers' attitude to climate change forming part of tertiary institutions' curriculum?
3. To what extent are adult education lecturers willing to take personal actions to mitigate climate change?
4. To what extent has participation in the study awakened adult education lecturers' desire to know more about climate change?

Research Method

The study adopted the descriptive survey research design. The population comprised all adult education lecturers in federal universities in South East Nigeria. The states in the area are Anambra, Enugu, Imo, Abia and Ebonyi but the study was carried out in the three states where there are federal universities that have departments of Adult and Continuing Education. Intact population was used because the number of adult education lecturers in federal universities in the South East are small. They comprise 15 Lecturers from Nnamdi Azikiwe University Awka [NAU] in Anambra State (Source: Study field work, 2020), 23 lecturers from University of Nigeria Nsukka [UNN] in Enugu State (Source: University of Nigeria Nsukka [UNN], 2020) and 4 lecturers from Michael Okpara University of Agriculture Umudike [MOUAU] in Abia State (Source: Study field work, 2020) making it a total population of 42 lecturers. The respondents comprised 25 male and female lecturers of different positions/cadres that filled and submitted either the hard copy or online questionnaire. Response to the online form was not as high as expected despite repeated sharing of the form in the lecturers' platforms. At the point of presenting the report of this study, it was found through personal communication that Adult Education lecturers in UNN are now 50 in number. The researchers decided to still make do with the people that responded as a way of contributing

to learning. According to Edmund Burke, an 18th Century statesman, nobody makes a greater mistake than he who did nothing because he could only do a little (Inspirational Quotes, n.d.). Adult education lecturers were purposively chosen as the respondents in order to find out the perspectives of these change agents that should drive developmental agenda. Federal universities were also chosen because they have more departments of Adult education than any other tertiary education sector in the area of study.

The instrument for this paper was extracted from a questionnaire tagged Climate Change Awareness and Attitude to Mitigation Questionnaire [CCAAMQ] 2020. It has parts A and B. Part A contains personal data on the respondents while sections A to E under Part B contains items for answering research questions for an entire study from which this report was extracted. The report of the study was too bulky and unwieldy for one paper so it was split into two. Paper 1 was presented in the 2021 Annual National Conference of Faculty of Education (Chukwuemerie, Obiozor and Ihekwoaba, 2021). This is the second paper. To avoid confusion, relevant portions have been extracted and arranged for the purpose of this paper as follows - Research question 1 (items 1 – 5), Research question 2 (items 6 – 10), Research question 3 (items 11 – 20) and just one question for research question 4. The items for each research question was developed in four likert scale type of Not at all concerned [NAAC], Slightly concerned [SC], Moderately concerned [MC] and Extremely aware [EC] for research question 1; responses of I don't care [IDC], I don't know [IDK], No and Yes were used for research question 2; Not at all willing [NAAW], Slightly willing [SW]; Moderately willing [MW] and Extremely willing [EW] were used for research question 3. Response options of Not at all awakened [NAAA], Slightly awakened [SA], Moderately awakened [MA] and Greatly awakened [GA] were used for research question 4.

Both hard copies and online copies (google form) of the questionnaire were administered in order to gather data. Hard copies were administered by the researchers to their colleagues but when restrictions on movements due to covid-19 pandemic made it impossible for physical distribution, online copy of the same questionnaire was designed and used to reach the population by sharing the link through the whatsApp pages of the concerned departments. Data obtained from 25 lecturers (60% of the population) who completed either the online or hardcopy questionnaire were collated and analyzed using mean scores for research questions 1 and 3 while percentage was used for research questions 2 and 4. Based on the four-point likert scale, a mean score of 2.50 was used as the benchmark for research questions 1 and 3. Therefore, any item that scored below 2.50 was seen as not concerned and not willing respectively while items that scored 2.50 and above were taken as concerned and willing. The results of research questions 2 and 4 were presented in frequency and percentage tables.

Presentation of Results

Research Question 1: To what extent are adult education lecturers in the federal universities in South East Nigeria concerned about climate change mitigation?

Table 1: Mean and standard deviation scores of adult education lecturers' concern towards climate change mitigation

S/N	Statements on concern about climate change	Mean	Remarks
1.	To what extent are you personally concerned about the threat of climate change to the development and sustainability of African economies?	2.89	Concerned
2.	How concerned are you that your individual decision affects the whole world as per your carbon foot print?	3.60	Concerned
3..	That developing nations don't seem to be committed to mitigating climate change as much as developed nations.	3.12	Concerned
4.	To what extent are you concerned that people in your locality do not seem to be mindful of their energy usage probably because they are not aware that their actions contribute to climate change.	3.16	Concerned
5.	To what extent are you concerned that most Nigerians don't seem to be aware of Nigerian government's main strategies for tackling climate change.	2.92	Concerned
	Grand Mean	**3.14**	

Table 1 shows that the mean ratings of the extent adult education lecturers concern about climate change range from 2.89 to 3.60. Lecturers were concerned about all the items. Based on the decision rule, with a grand mean of 3.14, adult education lecturers are adjudged to be very concerned about climate change.

Research Question 2: What is adult education lecturers' attitude to climate change forming part of tertiary institutions curriculum?

Table 2: Adult education lecturers' attitude to climate change forming part of tertiary institutions' curriculum

S/N	Attitude of adult education lecturers to clearly making Climate change a part of tertiary institutions' curriculum	I don't care n (%)	I don't know n (%)	No n (%)	Yes n (%)
6.	Do you think climate change should be incorporated into the curriculum of various levels of education in tertiary institutions?	2 (8)	2 (8)	0 (0)	21(84)
7.	Do you give your students assignments/ projects based on climate change?	0 (0)	1 (4)	20 (80)	4 (16)
8.	Would you like to continue / start giving climate change-based assignment to your students?	4 (16)	3 (12)	3 (12)	15 (60)
9.	Do you know if climate change campaigns are carried out in your institution?	0 (0)	9 (36)	8 (32)	8 (32)
10.	Do you think it is necessary for climate change campaigns to be carried out regularly in university campuses?	2 (8)	0 (0)	2 (8)	21(84)

Table 2 shows a high majority, 84%, answered yes to incorporating climate change into the curriculum of various levels of education in tertiary institutions; 80% of respondents do not give their students assignments/projects on climate change; only 32% knew that climate change campaigns were carried out in their institutions; and 84% agreed that it was necessary for climate change campaigns to be carried out in university campuses. This result

shows that adult education lecturers would want climate change to be made part of tertiary institutions' curriculum.

Research Question 3: Are adult education lecturers willing to take personal actions to mitigate climate change?

Table 3: Mean and standard deviation scores of adult education lecturers' willingness to take personal actions to mitigate climate change

S/N	Willingness to take personal actions to mitigate climate change	Mean	SD	Remarks
11.	Deliberately join actual efforts to mitigate climate change if invited	3.24		Willing
12.	Spend your money to organize climate change awareness campaign.	2.40		Not willing
13.	Join in taking awareness campaigns to rural communities in your state.	3.12		Willing
14.	Sacrifice some personal convenience in order to reduce your energy consumption that affect the climate.	3.00		Willing
15.	Ride bicycle or walk instead of driving cars.	2.68		Willing
16.	Use public transport where it is available instead of using your car or motorcycle.	2.68		Willing
17.	Reduce consumption, reuse and recycle materials.	3.32		Willing
18.	Install solar panel.	2.96		Willing
19.	Deliberately join a friend or neighbour's car to events rather using your car to reduce emission of carbon.	2.84		Willing
20.	Intentionally continue to use cooking gas even as it has become very costly instead of resorting to firewood as many Nigerians now do.	3.00		Willing
	Grand Mean	**2.92**		

Table 3 shows that the mean ratings of adult education lecturers' willingness to play roles ranges from 2.62 to 3.32 in all the items except item 12 (spend your money to organize climate changes awareness campaign) with mean of 2.42. Lecturers were willing to play roles in 9 out of the 10 items. Based on the decision rule, with a grand mean of 2.92, adult education lecturers are deemed very willing to play role in climate change mitigation.

Research Question 4: To what extent has participation in the study awakened adult education lecturers' desire to know more about climate change?

Table 4: Table of frequency and percentage depiction of the extent participation in the study has awakened the interest of respondents to know more about climate change

Responses	Males(n)	Females(n)	Total	Percent
a. Not at all	1	2	3	13.04%
b. Slightly	2	0	2	8.70%
c. Moderately	4	3	7	30.43%
d. Great extent	4	7	11	47.83%
Total	**11**	**12**	**23**	**100%**

Two out of 25 respondents did not answer this question. A total of 23 respondents did. Only 13.04% were not at all awakened to desire to know more about climate change while 8.70% were slightly awakened. On the other hand, 30.43% (moderately awakened) and 47.83% (greatly awakened) make up 78.26% of the respondents. Majority of the respondents were greatly awakened to know more about climate change because they participated in the study.

Discussion of Findings

The result of the study is discussed hereunder as it relates to each of the four research questions. Table 1, which showed the state of the respondents' concern about climate change mitigation, indicated that adult education lecturers were very concerned about the threat of climate change to the development and sustainability of African economies; that their individual decision affects the whole world as per their carbon foot print; that developing nations don't seem to be committed to mitigating climate change as much as developed nations; that people in their locality do not seem to be mindful of their energy usage probably because they are not aware that their actions contribute to climate change; and that most Nigerians don't seem to be aware of Nigerian government's main strategies for tackling climate change. This finding on the respondents' high concern is in line with the finding of Wei et al. (2014) where more than half of the respondents, who were health officials in Shanxi Province of China, were concerned about the threat of climate change. On the other the other hand, the study by Ezeudu, Ezeudu and Sampson (2016) among senior secondary school students in Umuahia Education Zone showed low attitude to climate change. The difference in the results of these studies may be traceable to experience and maturity. Adult education lecturers and health professionals are more experienced and more matured than secondary school students. They may also have witnessed more climate change disasters and are by virtue of that more attuned to the reality of the threat of climate change. The concern of adult education lecturers towards climate change mitigation is a step in the right direction. This concern is bound to lead to critical consciousness which will ultimately lead to action that will redress climate change. Adult education lecturers, as adult educators possess the key to bringing about change in the world due to their peculiar training as agents of transformation and agents for solving the ever evolving problems of the world.

The result of the present paper also showed that the respondents were favourably disposed towards making climate change part of the curriculum in tertiary institutions. 84%, answered yes to incorporating climate change into the curriculum of various levels of education in tertiary institutions; 80% of respondents do not give their students assignments/projects on climate change; only 32% knew that climate change campaigns were carried out in their institutions; and 84% agreed that it was necessary for climate change campaigns to be carried out in university campuses. According to Ishaya and Obaja (2008), as cited in Ezeudu, Ezeudu and Sampson (2016), secondary school teachers have been inculcating climate change contents into their respective subjects with the intention of ultimately influencing their students' attitude to climate change positively towards solving problems. Other studies also agreed that curriculum content could be used to promote awareness that leads to right attitude to climate change (Chinedu, 2008 and Ofoebe, 2008 as cited in Ezeudu, Ezeudu and Sampson, 2016). The implication of this finding of the present study is that adult education lecturers

would influence policy makers to make climate change part of the curriculum of tertiary institutions. T are also likely engage their students and institutions in more climate change related activities.

The result of the study also deemed adult education lecturers very willing to play role in climate change mitigation. Adult education lecturers were willing to play all the roles itemized save spend their money to organize climate change awareness campaign. This exception could be because of reasons which include that they may not feel adequately remunerated. Besides, this study was carried out during the thick of COVID-19 pandemic and ASUU strike when lecturers were being owed several months' salaries, so it was a period of lack for many lecturers. Thoughts of feeding themselves and their families may have been uppermost in their minds. Hardly would anybody in such condition entertain thought of using scarce resources to organize climate change awareness campaign. Specifically, adult education lecturers were willing to deliberately join actual efforts to mitigate climate change if invited; join in taking awareness campaigns to rural communities in their state; sacrifice some personal convenience in order to reduce their energy consumption that affect the climate; ride bicycle or walk instead of driving cars; use public transport where it is available instead of using their car or motorcycle; reduce consumption, reuse and recycle materials; install solar panel; deliberately join a friend or neighbour's car to events rather using their car to reduce emission of carbon; intentionally continue to use cooking gas even as it has become very costly instead of resorting to firewood as many Nigerians now do. The high mean scores to these items indicate that adult education lecturers are very willing to play roles in climate change mitigation. This finding is in line with Wei et al. (2014), where 84.4% of the respondents were willing to join actual efforts to mitigate climate change, 66.9% were willing to make personal sacrifices, while 56.4% were willing to consider environmental factors before making purchases. Willingness to play role in climate change mitigation involves change in lifestyle. Dioha and Emodi (2018), Nkechi et al. (2016), Elias and Omojola (2015) as cited in Heider (2019) supported the need to encourage sustainable lifestyle choices among Nigerians. These researchers made a case for less meat consumption, phasing out of inefficient appliances and greater access to and use of public transportation. They also emphasized the need to encourage public infrastructure and services for effective waste reduction.

In a bid to establish if participation in studies like the present trigger more interest in the subject matter, this study posed research question four to respondents. It was found that only 13.04% were not at all awakened to desire to know more about climate change while 8.70% were slightly awakened. On the other hand, 30.43% were moderately awakened and 47.83% were greatly awakened. This showed that a total of 78.26%, that majority of the respondents, were awakened to desire to know more about climate change by virtue of their participation in the study. Engaging in research is part of the tripartite duty of academics. Adult education lecturers and other lecturers would be encouraged to embark on climate change-related researches and campaigns if funds are made available for them. The high level of willingness to play roles and desire to know more about climate change show that they will be available to partner with both international and national NGOs, governmental agencies, stakeholders in rural communities'

development and professionals in environmental sciences in the battle against climate. Studies have found that willingness do not automatically translate to action. In fact, the study by Wei et al. found that health officials were willing but their actions were limited. It was obvious from the findings of present study that adult education lecturers were not willing to use personal funds to carry out campaigns but it can be implied that if they are sponsored they would do so. There is therefore need to fill the gap between willingness and action/ limited by funding. This will ultimately make for development and sustainability of African economy.

Recommendation

Based on the findings of the study, the researchers recommend that that stakeholders in environmental matters should utilize adult education lecturers in redressing climate change at all levels of government and through the activities of NGOs. Funds in form of grants should be made available for them to embark on climate change related researches and campaigns in order to bridge the gap between willingness to do and action. Climate change should be made part of the curriculum at all levels of studies in tertiary institutions. Institution wide climate change campaigns should be mandatorily carried out in tertiary institutions at least once every semester.

Conclusion

This study concludes that adult education lecturers in the federal universities in South East Nigeria are concerned about climate change mitigation; that adult education lecturers' were favourably disposed to making climate change part of tertiary institutions' curriculum; that adult education lecturers were willing to play roles and make some personal sacrifices in climate change mitigation; and that participation in the study have awakened the interest of adult education lecturers to desire to know more about climate change.

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